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18 **UNITED STATES DISTRICT COURT**
 19 **NORTHERN DISTRICT OF CALIFORNIA**

20 ANIBAL RODRIGUEZ, SAL CATALDO,
 21 JULIAN SANTIAGO, and SUSAN LYNN
 22 HARVEY individually and on behalf of all
 23 other similarly situated,

24 Plaintiffs,

v.

25 GOOGLE LLC,

26 Defendant.

27 Case No.: 3:20-cv-04688-RS

28 **DECLARATION OF MARK KEEGAN IN
 SUPPORT OF PLAINTIFFS' MOTION
 FOR CLASS CERTIFICATION**

Judge: Hon. Richard Seeborg
 Courtroom 3 – 17th Floor
 Date: October 5, 2023
 Time: 1:30 p.m.

DECLARATION OF MARK KEEGAN

I, Mark Keegan, declare as follows.

1. Counsel for the *Rodriguez* Plaintiffs retained me to provide expert analysis and, if requested, expert testimony. I have personal knowledge of the matters set forth herein and am competent to testify.

2. I submit this declaration in connection with Plaintiffs' Motion for Class Certification.

3. Attached is a true and correct copy of the Expert Report that I prepared in connection with this matter, dated February 20, 2023. The opinions I provided therein are true and correct to the best of my knowledge.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed this 18th day of July, 2023, at Rye, New York.

/s/ Mark Keegan



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**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

Expert Report of Mark Keegan

Keegan & Donato Consulting, LLC



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Exhibits

Exhibit 1—Mark Keegan C.V.

Exhibit 2—Documents Considered

Exhibit 3—Questionnaire (Screen Shots)

Exhibit 4—Questionnaire (Editor Export)

Exhibit 5—Tabulated Data

Exhibit 6—Untabulated Data

Exhibit 7—Disposition of Contacts



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Summary of Assignment

1. Keegan & Donato Consulting LLC was retained by counsel for the Plaintiffs in this action (“Counsel”) to design and execute a survey to gauge certain aspects of prospective Class Members’ smartphone and tablet use (“device use”) and Google Gmail e-mail account use.
2. To this end, I designed and executed a nationally representative general population study of 1,039 U.S. respondents. Qualifying respondents were asked a series of questions designed to collect relevant information about their current device use and Google Gmail e-mail account use.
3. A list of the documents I relied upon in formulating my opinions appears as Exhibit 2.
4. Based on my review of the Fourth Amended Complaint and directions from Counsel, I assume the following for purposes of my analysis:
 - a. The Class Period begins in 2016 and is continuing through the present (“Class Period”).¹
 - b. The two proposed classes are described in the Fourth Amended Complaint,² with the difference being whether the people used device(s) running the Android operating system (the first class) or device(s) using a non-Android operating system (the second class) (“Classes” with members of the Classes being “Class Members”).
 - c. Class Members are limited to people within the United States.³

¹ For purposes of my survey, the specific start date in 2016 was not relevant.

² Fourth Amended Complaint ¶ 249.

³ Ibid, ¶ 17.

5. Keegan & Donato Consulting is being compensated for my work on this assignment at the hourly rate of \$600. Keegan & Donato Consulting's compensation is not dependent on the outcome of this case.
6. As discussed in detail below, my study conforms to best practices of survey research. All findings are presented with a reasonable degree of scientific certainty.
7. The methodology and results of my study are presented in detail in the sections that follow.

Firm Overview

8. I am a principal at Keegan & Donato Consulting, a consulting firm serving litigators and their clients. Our areas of expertise include marketing analysis, intellectual property, consumer survey research, damages analysis, forensic economic analysis, and related disciplines. Our firm designs and executes methodologically sound consumer survey research studies and conducts objective evaluation of existing survey research as well as collaborates on a wide range of marketing and complex commercial litigation issues. We are also regularly engaged by clients for non-litigation consulting assignments related to marketing research and strategy.
9. I have over 20 years of experience conducting consumer research. Over the course of my career, I have personally conducted over 1,000 consumer surveys reaching more than 250,000 consumers. Many of these surveys have been admitted into evidence in federal courts, state courts, at arbitration, to the Trademark Trial and Appeal Board, the National Advertising Division of the Council of Better Business Bureaus, and the United States International Trade Commission. I have often served as a rebuttal witness. In the past four years, I have been deposed or testified at trial in conjunction with my involvement in litigation matters 35 times.
10. I am a graduate of the University of Georgia's *Principles of Market Research Program*. This comprehensive course of study, developed in concert with the Market Research Institute International (MRII), is a post-graduate program for marketing industry professionals covering all aspects of the market research process. Coursework is based on the MRII's Market Research Core Body of Knowledge (MRCBOK), a compilation of the underlying principles and essential skills that comprise the market research process. Certification is conferred only upon participants who demonstrate mastery of concepts presented in 284 detailed module studies across 13 core areas of market research, as determined via rigorous

procctored examinations. The University of Georgia's *Principles of Market Research Program* is endorsed by all major market research and insights industry associations, including ESOMAR and the Insights Association.

11. I am a member of the American Marketing Association (AMA), the preeminent professional association for marketing practitioners and scholars. From the AMA I have earned the designation of Professional Certified Marketer (PCM). The AMA confers the PCM certification upon individuals who have demonstrated a mastery of comprehensive and core marketing knowledge and principles. PCM certification requires rigorous testing, ongoing professional development, and a commitment to upholding the highest standards in the marketing field. The AMA only accepts into the PCM certification program applicants with demonstrated professional experience in the field of marketing.
12. My educational background additionally includes a J.D. from Brooklyn Law School and a B.A. in History from Pace University. I have completed coursework in the MBA program at the Lubin School of Business at Pace University and in Harvard University's Corporate Finance Certificate program. I have also served as a Registered Representative, National Association of Securities Dealers (Series 7, expired).
13. Keegan & Donato Consulting is a member of ESOMAR, the leading global association for market, social, and opinion research, the American Association for Public Opinion Research (AAPOR), a professional organization of more than 2,000 public opinion and survey research professionals in the United States and from around the world, the International Trademark Association (INTA), and the Association for Consumer Research (ACR). I have published in an ESOMAR compendium on the benefits of methodologically sound marketing research. I have taught CLE-accredited courses on survey research for litigation at the Florida Bar's Annual IP Symposium and have addressed the Pennsylvania Bar Association's Intellectual Property Law group with a presentation on the building blocks of survey research for litigation, consumer research best practices, and current trends in the industry.
14. Additional information about my credentials is provided at Exhibit 1 to this report. Exhibit 1 also lists the matters in which I have provided testimony over the last four years. A listing of the documents I considered in formulating my opinions appears as Exhibit 2.

Methodology

Study Integrity

15. This study of 1,039 U.S. respondents was designed and executed in accordance with accepted standards of survey research. This survey follows the guiding principles for survey research for the purpose of litigation as outlined by Shari Diamond,⁴ including but not limited to:

- Appropriate universe selection and sampling frame;
- Rigorous and valid survey design that is probative of the relevant issues in the matter;
- Inclusion of representative, qualified respondents;
- Use of procedures to minimize potential biases in data collection;
- Use of objective, non-leading questions;
- Use of procedures to reduce guessing among respondents; and
- Full analysis and reporting of survey data.

16. Additional treatises commonly referenced by researchers conducting survey research for litigation were also instrumental in the design of the current research.⁵

Study Objectives

17. The primary objective of the study that I designed and conducted in this case was to obtain information regarding prospective Class Members, focusing on their device use and whether such individuals have one or more Google Gmail accounts.

Study Population

18. Surveys are conducted by collecting data from a sample, or subset, of the population of interest, i.e., the larger group to which the study results may be projected. This survey is intended to provide information relevant to the proportion of U.S. respondents who may be

⁴ Diamond, S. (2011). "Reference Guide On Survey Research," in *Reference Manual on Scientific Evidence*. Federal Judicial Center/National Academy of Sciences, p. 359-423.

⁵ See, for example, McCarthy, J.T. (2020). *McCarthy on Trademarks and Unfair Competition*, 5th Ed.; Jacoby, J. (2013). *Trademark Surveys, Volume 1: Designing, Implementing, and Evaluating Surveys*.

Class Members—i.e., people using device(s) running the Android operating system and/or device(s) using a non-Android operating system and may meet the requirements to be included in the prospective Classes.

19. Consistent with typical marketing research practice, only respondents aged 18 and older were permitted to participate in the study. Respondents who met the study population definition were identified through the use of screening questions that qualified respondents on these criteria (see Questionnaire at Exhibit 3).

Study Design

20. This research employed a study design wherein respondents were questioned about their current smartphone and tablet use and whether they have one or more Google Gmail accounts. A range of standard marketing research techniques were employed to address issues that are relevant to this matter.
21. After qualifying respondents through a screening module (discussed below), the main portion of the study asked respondents questions pertaining to the following issues:
 - Whether they currently have a smartphone for their own personal use and, if yes, which operating system is running on that device (their “primary device”);
 - How long they have had their primary device and whether their primary device is their first smartphone, replaced an older smartphone, or is maintained in addition to another smartphone or smartphones;
 - Whether they currently have one or more Google Gmail e-mail accounts and, if yes, how many; and
 - How many Apple iPhones, Apple iPads, Android phones, and/or Android tablets they currently use.
22. Consistent with standard marketing research practice, an attention filter and several demographic questions were also administered.

Data Collection

23. This survey was completed through online interviewing via the Internet. Online interviewing is the dominant data collection method used in marketing research today.⁶ Data collection for this study took place in February 2023.
24. The respondent sample for this project was provided by the Dynata⁷ consumer panel. Dynata is a leading provider of online sample for research projects in the U.S. and across the globe. Dynata maintains an actively managed online panel of millions of consumers. Membership in the panel is by invitation only, and Dynata employs and enforces a range of policies and procedures to ensure “panel health”—i.e., that the panel is nationally representative and that respondents provide honest and accurate answers to questions. Additional panel health checks include participation limits, screening questions, digital fingerprinting, IP verification, anti-automation filtering, random and illogical responding, capturing and removing flatliners and speeders, among others. Dynata utilizes a “double opt-in” procedure in its recruitment process, which helps to verify the respondent’s identity and ensure the panel is populated by quality participants.⁸
25. I have personally used Dynata as a sample provider for many consumer research studies, am familiar with its panel health procedures, and am satisfied that it provides high quality, representative respondents. The Dynata consumer panel constituted the sampling frame of the study.
26. The survey was programmed using Qualtrics, an industry-leading online survey software platform. All survey programming was performed by Keegan & Donato Consulting. The survey software facilitates the programming and execution of advanced survey designs, custom coding, complex skip logic, and advanced rotation and randomization of questions, answer options, and stimuli. All such options were employed wherever appropriate.

⁶ *Global Market Research 2022: An ESOMAR Industry Report*, p. 106-109.

⁷ <https://www.dynata.com>.

⁸ *Ibid.*

Sampling

27. Surveys typically, and in this case, are designed such that the results are reliable at the 95 percent confidence level.⁹ A total of 1,039 respondents qualified for and completed the questionnaire (see full disposition of contacts at Exhibit 7). Samples of this size are associated with a maximum margin of error of ± 3.0 percentage points at 95 percent confidence.¹⁰

Bias Management

28. All efforts were made to present the survey questions in an objective, unbiased, and non-leading format. Respondents were presented with a “don’t know,” “no opinion,” or equivalent answer option wherever appropriate throughout the survey to minimize guessing.

29. It is common in consumer survey research for the researcher to employ various types of randomization of questions and answer options across respondents. Randomization is an important tool that researchers use to minimize the potential for order bias (i.e., order effects) to impact the study’s results. Order bias refers to a respondent’s tendency to select the first answer in a given list of answer options regardless of the question content¹¹ or answer the first question in a series of questions differently than later questions.¹² In this study, randomization was used wherever possible to minimize the potential for order bias.

30. To ensure the integrity of the data, I sought to identify “speeders” for potential removal from the sample. Respondents who complete a survey too quickly may introduce respondent-

⁹ “Traditionally, scientists adopt the 95% level of confidence, which means that if 100 samples of the same size were drawn, the confidence interval expected for at least 95 of the samples would be expected to include the true population value.” See Diamond, S. (2011). “Reference Guide On Survey Research,” in Reference Manual on Scientific Evidence. Federal Judicial Center/National Academy of Sciences, p. 381.

¹⁰ Statistical testing performed at: <https://www.surveysystem.com/sscalc.htm>.

¹¹ Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2000). Survey research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of Research Methods in Social and Personality Psychology*. Cambridge University Press, p. 240.

¹² See Diamond, S. (2011). “Reference Guide On Survey Research,” in Reference Manual on Scientific Evidence. Federal Judicial Center/National Academy of Sciences, p. 396: “To control for order effects, the order of the questions and the order of the response choices in a survey should be rotated, so that, for example, one-third of the respondents have Product A listed first, one-third of the respondents have Product B listed first, and one-third of the respondents have Product C listed first. If the three different orders are distributed randomly among respondents, no response alternative will have an inflated chance of being selected because of its position, and the average of the three will provide a reasonable estimate of response level.”

related error into the survey data. Respondents were to be flagged if they completed the survey in less than one-third of the median completion time across all respondents in the sample.¹³ Three respondents were removed from the sample based on this criterion.

31. I additionally reviewed the data for low-quality and nonsense responses. Low-quality responses are not reflective of actual consumer opinions and therefore introduce biases into the data. Based on this criterion, eight respondents were removed from the sample. All removed responses are provided at Exhibit 6.
32. Consistent with standard survey methodologies and practices, the screening portion of the questionnaire also employed security questions, including a CAPTCHA question to prevent bots and other automated respondents from participating in the study. Respondents who did not pass the security measures were not permitted to complete the survey.
33. The study was conducted under “double blind” conditions—neither the panel provider nor the survey participants knew the purpose of the study or the sponsoring party. Double blind research is designed to prevent external or circumstantial bias from impacting the survey process and results.

Questionnaire

34. In consumer surveys, data are collected by means of a questionnaire. The language and mechanics of the questionnaire are provided in summary below. Screenshots of the questionnaire as it was viewed by respondents are provided at Exhibit 3.
35. The questionnaire opened with a CAPTCHA question as a security measure. This question type confirms that the study participants are live respondents and prevents bots and other automated respondents from participating in the study. Only respondents who completed the CAPTCHA correctly were permitted to continue with the survey.
36. Upon passing the CAPTCHA, respondents were presented with a standard survey research statement that conveyed relevant information about duration, privacy issues, etc., and

¹³ Less than one-third of the median completion time is the industry standard for identifying speeders for removal. See for example, Kugler, M.B. and Henn, Jr., R.C., (2022). “Internet Surveys in Trademark Cases.” in *Trademark and Deceptive Advertising Surveys: Law, Science, and Design, Second Edition*. Diamond, S.S. & Swann, J.B. (eds.), American Bar Association, p. 305-306. See also, <https://www.responsivmr.com/news/evaluating-and-ensuring-survey-respondent-quality>.

instructed respondents not to guess if they did not know the answer to a question but, instead, to use the “Don’t know” option that was provided when appropriate. Only respondents who indicated that they understood the instructions were allowed to continue with the survey.

37. The next question asked respondents to provide their age. Only respondents aged 18 and older were permitted to continue with the survey:

Which of the following age brackets contains your age on your last birthday?

- m Under 18
- m 18 - 30
- m 31 - 40
- m 41 - 50
- m 51 - 60
- m 61 - 70
- m 71 or older

38. On the next screen, respondents were asked to indicate the state in which they reside. This question was for demographic information purposes only and was not used to filter out any respondents:

In which U.S. state do you currently reside?



39. Respondents were next asked to provide their gender:

What is your gender?

- m Male
- m Female
- m Non-binary or other
- m Prefer not to answer

40. On the next screen, respondents were presented with the following instruction not to guess at any of their answers:

For the remainder of this survey, if you do not know or do not have an opinion about any of the questions, please select the "don't know / no opinion" answer option. Please do not guess at any of your answers and please do not use the Internet or any other sources to inform your answers.

41. In the next question, respondents were asked to indicate whether they currently have a smartphone for their own personal use:

Which of the following applies to you personally?

- m I **do** currently have a smartphone for my own personal use
- m I **do not** currently have a smartphone for my own personal use
- m Don't know

42. Respondents who indicated that they do not currently have a smartphone for their own personal use skipped to the demographics portion of the questionnaire. Respondents who indicated that they do currently have a smartphone for their own personal use—defined as their “primary device”—were asked which operating system they have on their primary device:

For the remainder of the survey the smartphone that you have for your own personal use will be referred to as your "primary device."

What operating system do you have on your primary device?

- m iOS (Apple iPhone)
- m Android (Samsung, Google Pixel, etc.)
- m Other (Windows, Blackberry, etc.)
- m Don't know

43. Next, respondents were asked to indicate how long they have had their primary device:

How long have you had your primary device?

- m One month or less
- m More than one month, but less than one year
- m One year to five years
- m More than five years
- m Don't know

44. The next question was designed to collect information on whether the respondent was a first time or more experienced smartphone user. Respondents were asked:

Which of the following most accurately describes your primary device?

- m My primary device replaced my previous smartphone
- m I maintain my primary device in addition to another smartphone or smartphones
- m My primary device is my first smartphone
- m Don't know

45. In the next part of the survey, respondents were probed to determine whether they currently have one or more Google Gmail e-mail accounts, and if yes, how many. Respondent were asked:

Do you currently have one or more Google Gmail e-mail accounts? A Gmail account is an e-mail account that has an e-mail address that ends in @gmail.com.

- m I **do** have one or more Gmail e-mail accounts
- m I **do not** have one or more Gmail e-mail accounts
- m Don't know

46. Respondents who indicated that they have one or more Google Gmail e-mail accounts were asked to indicate the number of Gmail accounts they currently have:

How many Gmail e-mail accounts do you currently have?

<input type="checkbox"/> m					
1	2	3	4	5 or more	Don't know

47. Finally, respondents were asked about the overall number of personal mobile devices that they currently use. These questions employed dynamic piping—i.e., respondents who previously indicated that their primary device is a smartphone running Apple iOS operating system were not presented with a “0” option for the Apple iPhone question (and the same for Android smartphone users for the Android smartphone question). Respondents were asked:

How many of each of the following personal mobile devices do you currently use?

Apple iPhone (iOS)

m	m	m	m
0	1	2	3 or more

Apple iPad (iOS)

m	m	m	m
0	1	2	3 or more

Android Phone (Samsung, Google Pixel, etc.)

m	m	m	m
0	1	2	3 or more

Android tablet (Samsung, Lenovo, etc.)

m	m	m	m
0	1	2	3 or more

48. The main questionnaire concluded with standard demographic questions regarding education level and household income, as well as a final attention filter question. The full questionnaire is provided at Exhibit 3.

Sample Characteristics

49. The sample for this study is nationally representative, providing a robust, projectable overview of the device use and Google Gmail e-mail use of prospective Class Members. Sample demographic characteristics for the study participants are shown in Table 1 below.

Table 1. Sample characteristics - demographics¹⁴

	% Respondents (n=1,039)
Age	
18 - 30	18.7
31 - 40	22.1
41 - 50	12.6
51 - 60	19.8
61 - 70	17.9
71 or older	8.9
Education	
Less than high school	1.9
High school graduate	21.8
Some college	22.4
2-year degree	13.0
4-year degree	26.7
Master's / Professional degree	11.0
Doctorate	3.3
Household income	
Under \$35,000	21.2
\$35,000 - \$49,999	17.1
\$50,000 - \$74,999	22.2
\$75,000 - \$99,999	15.3
\$100,000 - \$124,999	7.0
\$125,000 - \$149,999	6.8
\$150,000 or more	8.1
I prefer not to answer	2.2
Gender	
Male	50.0
Female	49.7
Non-binary or other	0.4
Prefer not to answer	0.0
Region	
Northeast	17.4
South	40.2
Midwest	20.2
West	22.1

¹⁴ Percentages may not add to 100 due to rounding.

Findings

50. The results of this study of 1,039 prospective Class Members provides information about current device use and Google Gmail e-mail account use among U.S. consumers. Findings for the specific metrics administered to survey respondents are presented in the sections below.¹⁵

Smartphone Use & Operating Systems

51. Respondents were first asked about whether they currently have a smartphone for their own personal use. As shown in Table 2 below, the vast majority of survey respondents—96.0 percent—reported that they currently have a smartphone for their own personal use. Just 3.3 percent of respondents reported that they currently do not have a smartphone and 0.8 percent selected the “don’t know” option.

Table 2. Current Smartphone Use Among Prospective Class Members

(Base: All respondents)	n	% (n=1,039)
I do currently have a smartphone for my own personal use	997	96.0
I do not currently have a smartphone for my own personal use	34	3.3
Don't know	8	0.8

52. The survey findings also provide information regarding the smartphone operating systems that are currently in use by prospective Class Members. As shown in Table 3 below, there was nearly an even split between Apple iOS users (48.1 percent) and Android users (51.0 percent).

Table 3. Current Use of Smartphone Operating Systems Among Prospective Class Members

(Base: Smartphone Users)	N	% (n=997)
iOS (Apple iPhone)	480	48.1
Android (Samsung, Google Pixel, etc.)	508	51.0
Other (Windows, Blackberry, etc.)	1	0.1
Don't know	8	0.8

¹⁵ Percentages may not add to 100 due to rounding.

Length of Ownership

53. Respondents who indicated owning a smartphone were next asked about how long they have owned their primary device. A majority of prospective Class Members who currently own a smartphone for their own personal use (60.1 percent) indicated owning their primary device for between one and five years. Nearly one quarter of smartphone owners (23.0 percent) reported owning their primary device for more than one month but less than one year. A full summary of these findings is shown in Table 4 below.

Table 4. Length of Ownership of Primary Device Among Prospective Class Members

(Base: Smartphone Users)	N	% (n=997)
One month or less	34	3.4
More than one month but less than one year	229	23.0
One year to five years	599	60.1
More than five years	130	13.0
Don't know	5	0.5

54. Respondents were also asked about their level of experience with regard to smartphone ownership. As shown in Table 5 below, a majority of respondents (69.8 percent) indicated that their current smartphone replaced a previous smartphone.

Table 5. Level of Experience with Primary Device Among Prospective Class Members

(Base: Smartphone Users)	N	% (n=997)
My primary device replaced my previous smartphone	696	69.8
My primary device is my first smartphone	219	22.0
I maintain my primary device in addition to another smartphone or smartphones	61	6.1
Other	10	1.0
Don't know	11	1.1

Google Gmail Accounts

55. Respondents were also asked about their use of Google Gmail e-mail accounts. As shown in Table 6 below, Gmail use was common among prospective Class Members, with 84.1 percent of current smartphone users reporting having at least one Gmail e-mail account.

Table 6. Google Gmail E-mail Account Use Among Prospective Class Members

<i>(Base: Smartphone Users)</i>	N	% (n=997)
I do have one or more Gmail e-mail accounts	838	84.1
I do not have one or more Gmail e-mail accounts	143	14.3
Don't know	16	1.6

56. Whereas a majority of current smartphone users with a Google Gmail e-mail account (51.7 percent) reported having just one Gmail account, having multiple Gmail accounts was also common. Table 7 below provides the breakout of the number of current Gmail accounts reported by survey respondents. Among all respondents with at least one Gmail account (n=838), the average number of Gmail accounts reported was 1.8 accounts per user.¹⁶

Table 7. Number of Google Gmail E-mail Accounts Currently Held by Prospective Class Members

<i>(Base: Smartphone Users with at least one Gmail account)</i>	N	% (n=838)
1	433	51.7
2	251	30.0
3	91	10.9
4	28	3.3
5 or more	32	3.8
Don't know	3	0.4

Specific Device Use

57. Finally, current smartphone users were asked to provide information regarding the number of personal mobile devices—i.e., Apple iPhones, Apple iPads, Android phones, and/or Android

¹⁶ For the mean calculation, the answer option “5 or more” was counted as five devices. “Don’t know” responses were excluded from the mean calculation.

tablets—they currently use. These numbers are provided for each type of device in Tables 8 through 11 below.

Table 8. Number of Apple iPhones in Use by Prospective Class Members

<i>(Base: Smartphone Users)</i>	N	% (n=997)
0	486	48.7
1	459	46.0
2	39	3.9
3 or more	13	1.3

Table 9. Number of Apple iPads in Use by Prospective Class Members

<i>(Base: Smartphone Users)</i>	N	% (n=997)
0	685	68.7
1	276	27.7
2	29	2.9
3 or more	7	0.7

Table 10. Number of Android Phones in Use by Prospective Class Members

<i>(Base: Smartphone Users)</i>	N	% (n=997)
0	431	43.2
1	488	48.9
2	57	5.7
3 or more	21	2.1

Table 11. Number of Android Tablets in Use by Prospective Class Members

(Base: Smartphone Users)	N	% (n=997)
0	699	70.1
1	264	26.5
2	27	2.7
3 or more	7	0.7

58. The mean numbers of each type of device in use by survey respondents are provided in Table 12 below.¹⁷

Table 12. Mean Number Devices in Use by Prospective Class Members¹⁸

Mean Number of Devices in Use
Apple iPhone
Apple iPad
Android Phone
Android Tablet

59. Across all four types of devices, prospective Class Members reported using an average of 1.9 devices.

60. These survey results are common evidence across both Classes that provide information regarding characteristics and metrics tied to members of each of the proposed Classes, with a focus on current device use and Google Gmail e-mail account use among prospective Class Members.

¹⁷ For the mean calculations, the answer option “3 or more” was counted as three devices.

¹⁸ Means are calculated among respondents reporting use of at least one of each type of device.

Conclusions

61. The findings of this study of 1,039 prospective Class Members provide empirical evidence regarding the current device use and Google Gmail e-mail account use among prospective Class Members.
62. Specifically, among prospective Class Members:
 - 96.0 percent currently have a smartphone for their own personal use;
 - 48.1 percent reported using Apple iOS on their primary device;
 - 51.0 percent reported using Android on their primary device;
 - 60.1 percent have had their primary device for between one and five years;
 - 69.8 percent reported that their current primary device replaced a previous smartphone; and
 - 84.1 percent reported having one or more Google Gmail e-mail accounts, with the average being 1.8 Gmail accounts per account holder.
63. The study findings also show that among users reporting using at least one of each type of device, prospective Class Members use, on average, 1.1 Apple iPhones, 1.1 Apple iPads, 1.2 Android phones, and 1.1 Android tablets. Across all four types of devices, prospective Class Members reported using an average of 1.9 devices.

I reserve the right to supplement and revise this report and the opinions expressed herein based on the availability of new information.



Mark Keegan

February 20, 2023

Date

Exhibit 1—Mark Keegan C.V.



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Mark T. Keegan, Esq.

Partner, Keegan & Donato Consulting, LLC

Education

- § Principles of Market Research Program, University of Georgia (graduated 2021)
 - Post-graduate program for industry professionals covering all aspects of the market research process
 - Coursework based on the Market Research Core Body of Knowledge (MRCBOK), a compilation of the underlying principles and essential skills that comprise the market research process developed by Market Research Institute International (MRII)
 - Certification conferred upon participants who demonstrate mastery of concepts presented in 284 detailed module studies across 13 core areas of market research
 - Endorsed by all major market research and insights industry associations, including ESOMAR and the Insights Association
- § Professional Certified Marketer (PCM), American Marketing Association (2015 – present)
 - AMA certification for individuals who have demonstrated a mastery of comprehensive and core marketing knowledge and principles
 - Designation conferred only upon successful completion of rigorous testing spanning full range of marketing principles and concepts
 - Ongoing professional development and education credits required on annual basis
 - PCM recipients must have demonstrated professional experience in the field of marketing
- § Juris Doctor, Brooklyn Law School (graduated 1995)
- § Bachelor of Arts, History, Pace University (graduated 1990)
- § MBA Coursework, Pace University, Lubin School of Business (1990 – 1991)
- § Corporate Finance Program, Harvard University (coursework)

Professional Memberships

- § Admitted to the Bar in the states of New York and Connecticut
- § Member, ESOMAR (World Association of Opinion and Marketing Research Professionals)
- § Member, International Trademark Association (INTA)
- § Member, American Marketing Association (AMA)
- § Member, American Association for Public Opinion Research (AAPOR)
- § Member, Association for Consumer Research (ACR)
- § Registered Representative, National Association of Securities Dealers (Series 7, expired)

Current Employment

- § Keegan & Donato Consulting, LLC, Litigation Consultant, Founding Partner (7/2011 – present)

Consumer Research Experience

- § Designed and executed over 1,000 consumer research studies reaching more than 250,000 respondents for corporate and litigation clients over the course of two-decade career
- § Focus on trademark and marketing research with principal areas of study including consumer confusion, trade dress, dilution, secondary meaning, genericness, false advertising, consumer perception, consumer understanding, and other consumer research issues
- § Represented a mix of both plaintiffs and defendants in litigation matters spanning a broad range of products, services, and industries
- § Submitted survey research expert reports in relevant venues including federal courts, state courts, at arbitration, to the National Advertising Division of the Council of Better Business Bureaus, and to the Trademark Trial and Appeal Board
- § Founder and owner of two successful marketing and consumer research consulting firms
- § Regularly testify to consumer behavior research, findings, and related issues at trials, depositions, hearings, and other proceedings

§ Qualified to testify as an expert in the field of consumer survey research at federal court trials:

- *BuzzBallz, LLC v. Jem Beverage Co.*, U.S. District Court (Central District of California), the Honorable William D. Keller presiding
- *Christopher Lewert v. Boiron, Inc.*, U.S. District Court (Central District of California), the Honorable André Birotte, Jr. presiding
- *Coty Inc., et al. v. Excell Brands LLC*, U.S. District Court (Southern District of New York), the Honorable Jesse M. Furman presiding
- *Bodum U.S.A., Inc. v. A Top New Casting, Inc.*, U.S. District Court, Northern District of Illinois, the Honorable Matthew F. Kennelly presiding
- *BillFloat Inc., d/b/a SmartBiz Loans v. Collins Cash Inc., d/b/a Smart Business Funding, et al.*, U.S. District Court (Northern District of California), the Honorable Edward M. Chen presiding

§ Qualified as a survey expert by numerous federal court judges (pre-trial)

§ Develop and execute consumer research studies using industry-accepted methodologies, cutting-edge technologies, and industry-leading consumer panel partners

Marketing and Other Relevant Experience

- § Served as a marketing consultant to private clients and have advised on a wide range of issues including product development and rollout, advertising, consumer feedback and intelligence, the product life-cycle, and other issues concerning marketing and marketing research
- § Formulated winning brand positioning strategies as a branding expert for some of the best-known consumer brands and services including General Electric (GE), Nike, Pepsi, Subaru, AOL, Excite, NBC, and others
- § Analyzed and evaluated comprehensive marketing campaigns for a broad range of corporate clients to determine their impact on consumers
- § Evaluated all components of integrated marketing communications including advertising, public relations, packaging, sales promotions, and point of sale materials, among others
- § Developed testimony on marketing messages and their intended influence on consumer understanding and behavior

Previous Employment

§ Keegan & Company LLC, Founding Partner (9/2001 – 12/2015)

Designed and executed consumer research studies, conducted complex litigation consulting, and developed marketing and economic analyses for clients across a range of industries

§ Information Markets Corp, Program Manager (2000 – 2001)

Managed enterprise-wide marketing and product development. Developed use cases and conducted consumer market research. Coordinated with multiple partners including AOL, Excite, and NBC.

§ Affiliation Networks, Inc., Project Manager (1999 – 2000)

Produced online advertising solutions for Fortune 500 clients. Coordinated creative team of account managers, designers, programmers and copywriters.

§ UpTick Technologies, Marketing Consultant (1999)

Managed the creation of innovative marketing products for large brokerage software provider

§ Cosmos Internet Solutions, Marketing Consultant (1998 – 1999)

Developed marketing strategy for business ISP and hosting provider as well as Web site marketing and development for clients

§ FactSet Research Systems, Product Development (1996 – 1998)

Formulated product and communications strategies for leading integrated financial and economic database provider

§ Warren Keegan Associates, Inc., Marketing Consultant (1992 – 1996)

Marketing consultant to clients across a range of industries. Edited and contributed content to marketing textbooks and other academic marketing publications.

§ BMW of North America, Inc., Graduate Appointment (1991)

Reviewed, analyzed, and cataloged broad-based market research on consumer preferences and attitudes in the automobile industry

Submitted Surveys Excluded by Courts*

“Criticism is an inevitable concomitant of being a trademark-survey expert.” Jacoby, J. (2013).

Trademark Surveys, Volume I: Designing, Implementing, and Evaluating Surveys, p. 87.

- § *Kudos, Inc. v. Kudoboard, LLC, et al.* (2021). This Squirt-style survey was designed to test for a likelihood of confusion between two competing brands of employee recognition software among users and likely purchasers of this type of software. The Court disagreed with the survey universe, opining that a narrower population definition should have been employed. A rebuttal report that I submitted in this matter was accepted by the Court.
- § *The Episcopal Church, et al. v. The Right Reverend Mark J. Lawrence, et al.* (2019). In this Teflon-style survey, I interviewed Episcopalians regarding the potential genericness of the mark THE EPISCOPAL CHURCH. The Court disagreed with the survey universe, opining that the population definition should have included non-Episcopalians.
- § *Warner Brothers Entertainment, Inc., et al. v. The Global Asylum, Inc.* (2012). A deficiency in the pleadings (the client’s failure to submit my resume among other credentials) led to the court excluding this survey at a preliminary injunction hearing. I did not testify in this matter.

Lectures, Presentations & Publications

- § *Squirt vs. Eveready: Battle of the Titans*, 9th Annual Intellectual Property Law Symposium, hosted by The Florida Bar Continuing Legal Education Committee and Business Law Section, April 12-13, 2018. CLE-accredited presentation.
- § *Panel Power: Online Panel Sampling for Litigation Surveys*, 8th Annual Intellectual Property Law Symposium, hosted by The Florida Bar Continuing Legal Education Committee and Business Law Section, March 30-31, 2017. CLE-accredited presentation.
- § *Evaluating a Brand's Equity in a Nascent Market*, ESOMAR World Research, The EUREKA's Project - Success Stories of Market Research, 2016.
- § *Consumer Survey Research for Litigation: With Great Data Comes Great Power*. Presentation before the Pennsylvania Bar Association, Intellectual Property Law Group, 12/8/2014.

* Lifetime. Court opinions available upon request.

Continuing Education

- § *Survey-Based Techniques for Optimizing Prices and Products: Overview and Best Practices*, ESOMAR Webinar, 1/18/2023.
- § *Eureka! The Science and Art of Insight*, ESOMAR Webinar, 12/8/2022.
- § *Online Sample Fraud: Causes, Costs & Cures*, Insights Association Webinar, 2/11/2022.
- § *Quantifying Unjust Enrichment*, Fox Forensic Accounting, 10/6/2021.
- § *Questionnaire Design Best Practices*, ESOMAR/University of Georgia Webinar, 5/19/2021.
- § *Making Online Samples More Representative*, ESOMAR Webinar, 3/17/2021.
- § *Intelligence 360: Solicited + Unsolicited Customer Opinion*, ESOMAR Webinar, 2/17/2021.
- § *The Future of Online Polling After 2020*, ESOMAR Webinar, 12/16/2020.
- § *The Opportunity for UX Research*, ESOMAR/University of Georgia Webinar, 12/8/2020.
- § *BigSurv20: Big Data Meets Survey Science*, Online Conference, November/December 2020.
- § *International Trademark Association (INTA), 141st Annual Meeting (2019)*, Attendee, May 2019.

Contact Information

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Mark Keegan Testimony List

Depositions (Past Four Years)

Case Caption	Court/Venue	Client
Tequila Los Abuelos S.A De C.V. (Fortaleza) v. Podlaska Wytwórnia Wódek "Polmos" S.A.	United States Patent and Trademark Office, Trademark Trial and Appeal Board	Plaintiff (Opposer)
Aman Group, S.à.r.l. v. Aman Spirits LLC, et al.	United States District Court, Central District of California, Western Division	Plaintiff
Steven Robert Prescott, et al. v. Reckitt Benckiser LLC	United States District Court, Northern District of California	Defendant
S10 Entertainment & Media, LLC v. Samsung Electronics Co., LTD, et al.	United States District Court, Central District of California	Plaintiff
Nestlé USA, Inc., et al. v. Ultra Distribuciones Mundiales S.A. de C.V., et al.	United States District Court, Western District of Texas, San Antonio Division	Defendants
Stitch, LTD v. TikTok, Inc., et al.	United States District Court, Southern District of California	Plaintiff
Van Leeuwen Ice Cream, LLC v. Rebel Creamery LLC	United States District Court, Eastern District of New York	Plaintiff
DarkOwl, LLC v. ArkOwl LLC and ArkOwl Corporation	United States District Court, District of Colorado	Defendants
Chasom Brown, et al. v. Google LLC	United States District Court, Northern District of California	Plaintiffs
BillFloat Inc., d/b/a SmartBiz Loans v. Collins Cash Inc., d/b/a Smart Business Funding, et al.	United States District Court, Northern District of California	Defendants
Kenco Bucket Trucks LLC v. Versabucket LLC, et al.	District Court, Harris County, Texas, 113 th Judicial District	Defendants
EBIN New York, Inc. v. SIC Enterprise, Inc., et al.	United States District Court, Eastern District of New York	Plaintiff
Kudos, Inc. v. Kudoboard, LLC, et al.	United States District Court, Northern District of California	Plaintiff



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Case Caption	Court/Venue	Client
Master Inspector Certification Board, Inc. v. Examination Board of Professional Home Inspectors, Inc.	United States Patent and Trademark Office, Trademark Trial and Appeal Board	Plaintiff (Petitioner)
Solid 21 Inc. v. Richemont North America, Inc. et al.	United States District Court, Southern District of New York	Defendants
Watching Time, LLC v. International Watchman, Inc.	United States Patent and Trademark Office, Trademark Trial and Appeal Board	Plaintiff (Petitioner)
Diamond Resorts U.S. Collection Development, LLC, et al. v. Newton Group Transfers, LLC, et al.	United States District Court, Southern District of Florida, West Palm Beach Division	Defendants
Fair Isaac Corporation v. Fido Alliance, Inc.	United States Patent and Trademark Office, Trademark Trial and Appeal Board	Defendant (Applicant)
Solid 21, Inc. v. Breitling U.S.A. Inc., et al.	United States District Court, District of Connecticut	Defendants
Juul Labs, Inc. v. Eonsmoke, LLC d/b/a 4X PODS, et al.	United States District Court, District of New Jersey	Defendants
Restoration Hardware, Inc., et al., v. Bungalow Home, LLC	United States District Court, Southern District of Ohio, Western Division	Plaintiffs
United States of America ex. rel., Yoash Gohil v. Sanofi U.S. Services Inc., et al.	United States District Court, Eastern District of Pennsylvania	Defendants
Alo, LLC v. Acadia Malibu, Inc., d/b/a Alo House Recovery Centers, et al.	United States District Court, Central District of California	Plaintiff
Farjad Fani, et al. v. Shartsis Friese LLP, et al.	JAMS Arbitration, JAMS Reference No. 1100104777	Claimants
Solid 21, Inc. v. Ulysse Nardin USA Inc., et al.	United States District Court, Southern District of Florida	Defendants
The Shoppes at River Station, LLC v. College Park Retail Investors, LLC	Superior Court of Fulton County, State of Georgia	Plaintiff
Spartan Chemical Company, Inc. v. Ecolab, Inc.	United States District Court, Northern District of Ohio, Western Division	Plaintiff



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Case Caption	Court/Venue	Client
Allergan USA, Inc. v. Imprimis Pharmaceuticals, Inc.	United States District Court, Central District of California, Southern Division	Defendant
The Episcopal Church, et al. v. The Right Reverend Mark J. Lawrence, et al.	United States District Court, District of South Carolina, Charleston Division	Plaintiffs
Spangler Candy Company v. Tootsie Roll Industries, LLC	United States District Court, Northern District of Ohio, Western Division - Toledo	Plaintiff
FCOA LLC v. Foremost Title & Escrow Services, LLC	United States District Court, Southern District of Florida	Defendant
J-B Weld Company, LLC v. The Gorilla Glue Company	United States District Court, Northern District of Georgia	Defendant



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Trials & Hearings (Lifetime)

Case Caption	Court/Venue	Client	Type
BillFloat Inc., d/b/a SmartBiz Loans v. Collins Cash Inc., d/b/a Smart Business Funding, et al.	United States District Court, Northern District of California	Defendants	Trial
Identity Intelligence Group, LLC v. Rocket Mortgage, LLC	United States District Court, District of Arizona	Plaintiff	Hearing
Amarussein Investments Luxembourg S.a.r.L. v. Signet Jewelers Brands Limited and Sterling Jewelers, Inc.	American Arbitration Association, New York, New York	Respondents	Hearing
Bodum U.S.A., Inc. v. A Top New Casting, Inc.	United States District Court, Northern District of Illinois, Eastern Division	Defendant	Trial
Coty Inc., et al. v. Excell Brands, LLC	United States District Court, Southern District of New York	Defendant	Trial
Christopher Lewert, et al., v. Boiron, Inc., et al.	United States District Court, Central District of California	Plaintiffs	Trial
BuzzBallz, LLC v. BuzzBox Beverages, Inc., et al.	United States District Court, Central District of California	Plaintiff	Trial



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About Us



Mark Keegan brings a wide breadth of experience to Keegan & Donato Consulting, having spent over two decades formulating case strategies in complex litigation. As a founding partner of Keegan & Donato Consulting, Mr. Keegan has actively consulted on a variety of litigation issues ranging from marketing and international business to consumer research for Lanham Act claims.

Prior to his work with Keegan & Donato Consulting, Mr. Keegan assisted a diverse range of companies as a marketing strategist and operations manager. From working with top brands to create innovative online advertising solutions to positioning and communicating a company's competitive advantage, Mr. Keegan's practical execution of successful marketing strategies has benefited several organizations.

Mr. Keegan received his law degree from Brooklyn Law School (1995) and is licensed to practice in New York and Connecticut. His undergraduate work was completed at Pace University where he received a Bachelor of Arts in history.



Tony Donato has served as a consultant in complex litigation matters since 2004. He has a broad range of experience in research, strategy, survey design & execution, data analysis and case management. Mr. Donato has consulted on a wide variety of marketing, intellectual property, and consumer behavior cases covering trademark, copyright, patent, best efforts, advertising, business damages, consumer surveys, business ethics, and other issues.

Mr. Donato has a strong analytical background which he developed in his prior employment as a member of the research team at Harvard Medical School's Division on Addictions. He is the co-author of several peer-reviewed journal articles.

Mr. Donato received a Master of Public Policy from Georgetown University (2002) and a Bachelor of Arts in politics from Ursinus College (2000).

Exhibit 2—Documents Considered



Documents Considered - Anibal Rodriguez, et al. v. Google, LLC

Court Documents

Complaint
 First Amended Complaint
 Second Amended Complaint
 Third Amended Complaint
 Fourth Amended Complaint
 Exhibit 34 to Plaintiffs' Motion for Leave to File Fourth Amended Complaint, Google's Supp'l Responses to Plaintiffs' Interrogatories, Set Six

References

Diamond, S. (2011). "Reference Guide On Survey Research," in Reference Manual on Scientific Evidence. Federal Judicial Center/National Academy of Sciences, p. 359-423
 Global Market Research 2022: An ESOMAR Industry Report
 Jacoby, J. (2013). Trademark Surveys, Volume 1: Designing, Implementing, and Evaluating Surveys.
 Kugler, M.B. and Henn, Jr., R.C., (2022). "Internet Surveys in Trademark Cases." in Trademark and Deceptive Advertising Surveys: Law, Science, and Design, Second Edition. Diamond, S.S. & Swann, J.B. (eds.), American Bar Association
 McCarthy, J.T. (2020). McCarthy on Trademarks and Unfair Competition, 5th Ed.
 Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2000). Survey research. In H. T. Reis & C. M. Judd (Eds.), Handbook of Research Methods in Social and Personality Psychology. Cambridge University Press

Public Sources

<https://www.dynata.com>
<https://www.responsivmr.com/news/evaluating-and-ensuring-survey-respondent-quality>
<https://www.surveysystem.com/sscalc.htm>

Production Documents

GOOG-RDGZ-00130745	GOOG-RDGZ-00203545	GOOG-RDGZ-00128059
GOOG-RDGZ-00015004	GOOG-RDGZ-00203679	GOOG-RDGZ-00128280
GOOG-RDGZ-00020680	GOOG-RDGZ-00014578	GOOG-RDGZ-00128911
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GOOG-RDGZ-00039094	GOOG-RDGZ-00025811	GOOG-RDGZ-00151568
GOOG-RDGZ-00171164	GOOG-RDGZ-00033244	GOOG-RDGZ-00156520
GOOG-RDGZ-00087964	GOOG-RDGZ-00037515	GOOG-RDGZ-00159759
GOOG-RDGZ-00044478	GOOG-RDGZ-00041092	GOOG-RDGZ-00160654
GOOG-RDGZ-00129096	GOOG-RDGZ-00044356	GOOG-RDGZ-00164257
GOOG-RDGZ-00090236	GOOG-RDGZ-00047446	GOOG-RDGZ-00164312
GOOG-RDGZ-00046896	GOOG-RDGZ-00052671	GOOG-RDGZ-00168139
GOOG-RDGZ-00151484	GOOG-RDGZ-00059283	GOOG-RDGZ-00169704
GOOG-RDGZ-00059486	GOOG-RDGZ-00087672	GOOG-RDGZ-00180854
GOOG-RDGZ-00046758	GOOG-RDGZ-00087914	GOOG-RDGZ-00181801
GOOG-RDGZ-00185669	GOOG-RDGZ-00089546	GOOG-RDGZ-00182573
GOOG-RDGZ-00061316	GOOG-RDGZ-00090741	GOOG-RDGZ-00184488
GOOG-RDGZ-00031656	GOOG-RDGZ-00118026	GOOG-RDGZ-00188868
GOOG-RDGZ-00149701	GOOG-RDGZ-00126932	

Exhibit 3—Questionnaire (Screen Shots)

Please complete the CAPTCHA below.

I'm not a robot 
reCAPTCHA
Privacy · Terms

Next >>

Thank you for agreeing to participate in this anonymous survey. The survey is for research purposes only. Your responses will be held confidential and we are not trying to sell you anything.

The survey will take just a few minutes of your time. Before we begin, please read the following instructions:

- This survey makes use of images. If you are currently using a device that does not have image capabilities, please stop now and resume this survey when you have access to a compatible device.
- If you typically wear eyeglasses when reading information or looking at pictures or videos on your electronic device, please put them on now and wear them through the remainder of this survey.
- If you don't know the answer, don't recall, or don't have an opinion on any of the questions that follow, please feel free to select that answer when provided. We do not want you to guess at any of your answers.
- Please do not look up answers to any of the survey questions on the Internet or consult with any other persons regarding your survey answers.
- Your browser's back button will be disabled during the survey. Please use the "Next" button within the survey to advance through the questionnaire.

Do you agree to follow the instructions provided above?

I agree

I do not agree

Don't know

[Next >>](#)

Which of the following age brackets contains your age on your last birthday?

Under 18

18 - 30

31 - 40

41 - 50

51 - 60

61 - 70

71 or older

[Next >>](#)

In which U.S. state do you currently reside?

[Next >>](#)

What is your gender?

Female

Male

Non-binary or other

Prefer not to answer

[Next >>](#)

For the remainder of this survey, if you do not know or do not have an opinion about any of the questions, please select the "don't know / no opinion" answer option. Please do not guess at any of your answers and please do not use the Internet or any other sources to inform your answers.

Click the "Next" button below to continue.

[Next >>](#)

Which of the following applies to you personally?

I **do not** currently have a smartphone for my own personal use

I **do** currently have a smartphone for my own personal use

Don't know

[Next >>](#)

For the remainder of the survey the smartphone that you have for your own personal use will be referred to as your "primary device."

What operating system do you have on your primary device?

iOS (Apple iPhone)

Android (Samsung, Google Pixel, etc.)

Other (Windows, Blackberry, etc.)

Don't know

[Next >>](#)

How long have you had your primary device?

One month or less

More than one month but less than one year

One year to five years

More than five years

Don't know

[Next >>](#)

Which of the following most accurately describes your primary device?

My primary device replaced my previous smartphone

I maintain my primary device in addition to another smartphone or smartphones

My primary device is my first smartphone

Other

Don't know

[Next >>](#)

Do you currently have one or more Google Gmail e-mail accounts? A Gmail account is an e-mail account that has an e-mail address that ends in @gmail.com.

I **do not** have one or more Gmail e-mail accounts

I **do** have one or more Gmail e-mail accounts

Don't know

Next >>

How many Gmail e-mail accounts do you currently have?

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5 or more	<input type="radio"/> Don't know
-------------------------	-------------------------	-------------------------	-------------------------	---------------------------------	----------------------------------

[Next >>](#)

How many of each of the following personal mobile devices do you currently use?

Apple iPhone (iOS)

0	1	2	3 or more
---	---	---	-----------

Apple iPad (iOS)

0	1	2	3 or more
---	---	---	-----------

Android phone (Samsung, Google Pixel, etc.)

0	1	2	3 or more
---	---	---	-----------

Android tablet (Samsung, Lenovo, etc.)

0	1	2	3 or more
---	---	---	-----------

[Next >>](#)

Please type "green" in the box below.

[Next >>](#)

Now, a few more questions for classification purposes only. Which of the following best describes your educational background?

Less than high school

High school graduate

Some college

2-year degree

4-year degree

Master's / Professional degree

Doctorate

[Next >>](#)

Which of the following includes your household's approximate annual income in 2022?

Under \$35,000

\$35,000 - \$49,999

\$50,000 - \$74,999

\$75,000 - \$99,999

\$125,000 - \$149,999

\$150,000 or more

\$100,000 - \$124,999

I prefer not to answer

[Next >>](#)

We thank you for your time spent taking this survey.
Your response has been recorded.

Exhibit 4—Questionnaire (Editor Export)

Start of Block: Intro

Q1 Please complete the CAPTCHA below.

Page Break -----



Q2 Thank you for agreeing to participate in this anonymous survey. The survey is for research purposes only. Your responses will be held confidential and we are not trying to sell you anything.

The survey will take just a few minutes of your time. Before we begin, please read the following instructions:

- This survey makes use of images. If you are currently using a device that does not have image capabilities, please stop now and resume this survey when you have access to a compatible device.
- If you typically wear eyeglasses when reading information or looking at pictures or videos on your electronic device, please put them on now and wear them through the remainder of this survey.
- If you don't know the answer, don't recall, or don't have an opinion on any of the questions that follow, please feel free to select that answer when provided. We do not want you to guess at any of your answers.
- Please do not look up answers to any of the survey questions on the Internet or consult with any other persons regarding your survey answers.
- Your browser's back button will be disabled during the survey. Please use the "Next" button within the survey to advance through the questionnaire.

Do you agree to follow the instructions provided above?

I agree (1)

I do not agree (2)

Don't know (3)

End of Block: Intro

Start of Block: Age | State



Q3 Which of the following age brackets contains your age on your last birthday?

- Under 18 (1)
- 18 - 30 (2)
- 31 - 40 (3)
- 41 - 50 (4)
- 51 - 60 (5)
- 61 - 70 (6)
- 71 or older (7)

Skip To: End of Block If Age = Under 18

Page Break

Q4 In which U.S. state do you currently reside?

▼ Alabama (1) ... None of these (53)

End of Block: Age | State

Start of Block: Gender



Q5 What is your gender?

- Male (1)
- Female (2)
- Non-binary or other (3)
- Prefer not to answer (4)

End of Block: Gender

Start of Block: Instruction

Q6 For the remainder of this survey, if you do not know or do not have an opinion about any of the questions, please select the "don't know / no opinion" answer option. Please do not guess at any of your answers and please do not use the Internet or any other sources to inform your answers.

Click the "Next" button below to continue.

End of Block: Instruction

Start of Block: Primary Device



Q7 Which of the following applies to you personally?

- I **do** currently have a smartphone for my own personal use (1)
- I **do not** currently have a smartphone for my own personal use (2)
- Don't know (3)

Skip To: End of Block If Smartphone != I do currently have a smartphone for my own personal use

Page Break



Q8

For the remainder of the survey the smartphone that you have for your own personal use will be referred to as your "primary device."

What operating system do you have on your primary device?

- iOS (Apple iPhone) (1)
- Android (Samsung, Google Pixel, etc.) (2)
- Other (Windows, Blackberry, etc.) (3)
- Don't know (4)

Page Break



Q9

How long have you had your primary device?

- One month or less (1)
- More than one month but less than one year (2)
- One year to five years (3)
- More than five years (4)
- Don't know (5)

Page Break



Q10 Which of the following most accurately describes your primary device?

- My primary device replaced my previous smartphone (1)
- I maintain my primary device in addition to another smartphone or smartphones (2)
- My primary device is my first smartphone (3)
- Other (4)
- Don't know (5)

End of Block: Primary Device

Start of Block: Google Accounts



Q11 Do you currently have one or more Google Gmail e-mail accounts? A Gmail account is an e-mail account that has an e-mail address that ends in @gmail.com.

- I **do** have one or more Gmail e-mail accounts (1)
- I **do not** have one or more Gmail e-mail accounts (2)
- Don't know (3)

Page Break

Display This Question:

If Gmail threshold = 1 do have one or more Gmail e-mail accounts

Q12 How many Gmail e-mail accounts do you currently have?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 or more (5)
- Don't know (6)

End of Block: Google Accounts

Start of Block: Number of Devices

Q13 How many of each of the following personal mobile devices do you currently use?

Q14 Apple iPhone (iOS)

Display This Choice:

If Operating system != iOS (Apple iPhone)

- 0 (1)
- 1 (2)
- 2 (3)
- 3 or more (4)

Q15 Apple iPad (iOS)

- 0 (1)
- 1 (2)
- 2 (3)
- 3 or more (4)

Q16 Android phone (Samsung, Google Pixel, etc.)

Display This Choice:

If Operating system != Android (Samsung, Google Pixel, etc.)

- 0 (1)
- 1 (2)
- 2 (3)
- 3 or more (4)

Q17 Android tablet (Samsung, Lenovo, etc.)

- 0 (1)
- 1 (2)
- 2 (3)
- 3 or more (4)

End of Block: Number of Devices

Start of Block: Data integrity - Green



Q18 Please type "green" in the box below.

End of Block: Data integrity - Green

Start of Block: Demographics



Q19 Now, a few more questions for classification purposes only. Which of the following best describes your educational background?

- Less than high school (1)
- High school graduate (2)
- Some college (3)
- 2-year degree (4)
- 4-year degree (5)
- Master's / Professional degree (6)
- Doctorate (7)

Page Break



Q20 Which of the following includes your household's approximate annual income in 2022?

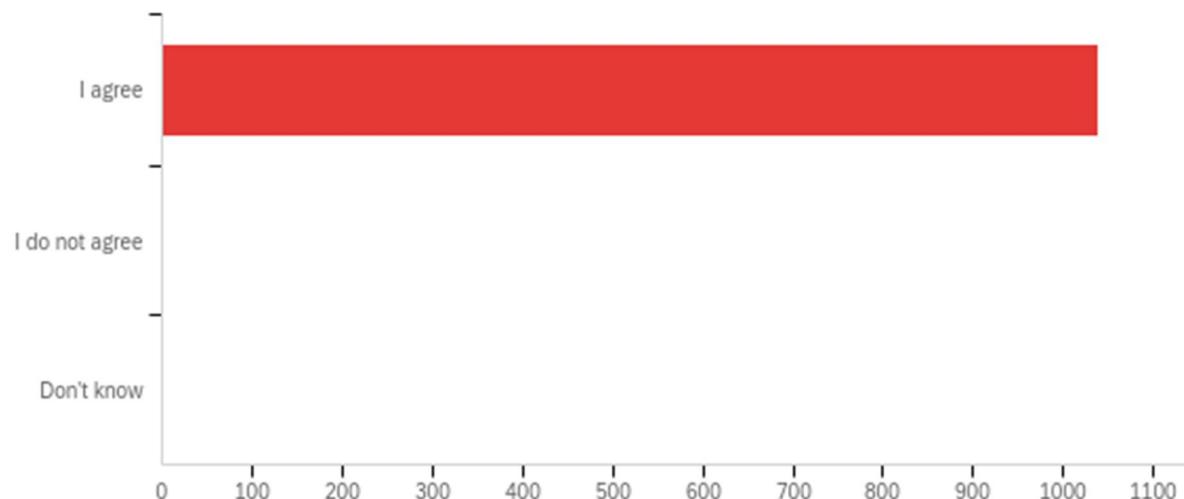
- Under \$35,000 (1)
- \$35,000 - \$49,999 (2)
- \$50,000 - \$74,999 (3)
- \$75,000 - \$99,999 (4)
- \$100,000 - \$124,999 (5)
- \$125,000 - \$149,999 (6)
- \$150,000 or more (7)
- I prefer not to answer (8)

End of Block: Demographics

Exhibit 5—Tabulated Data

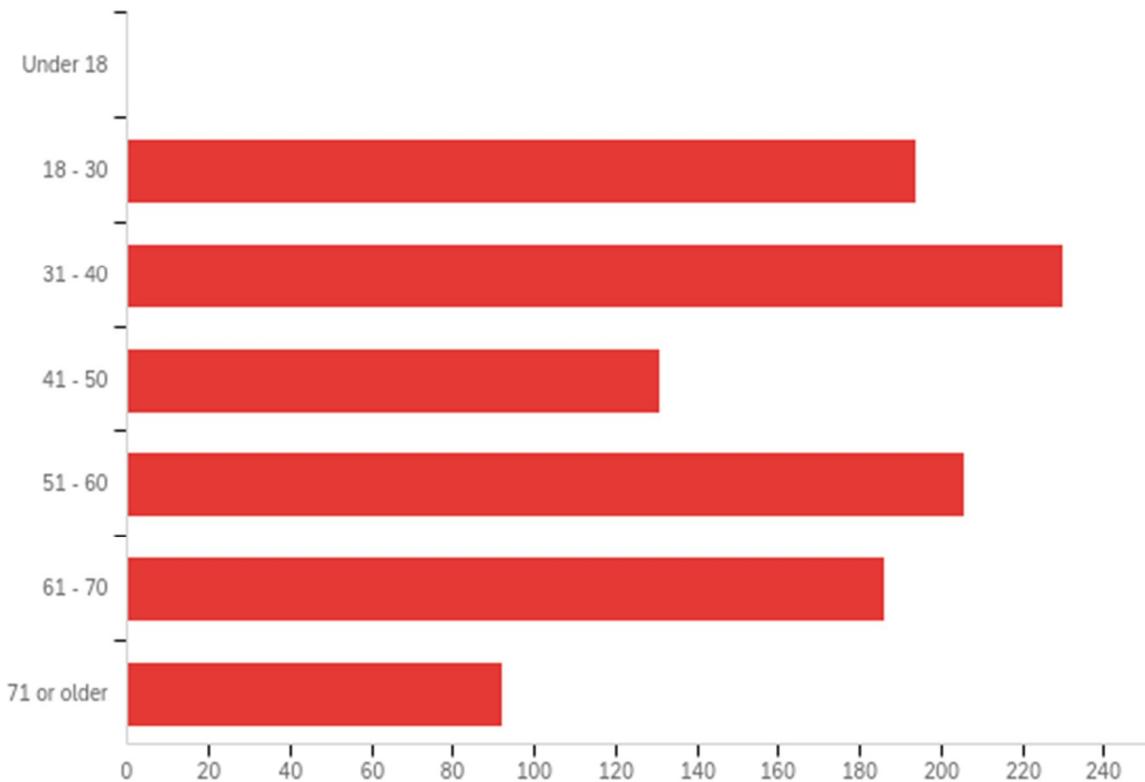
Q1 - CAPTCHA

Q2 - Do you agree to follow the instructions provided above?



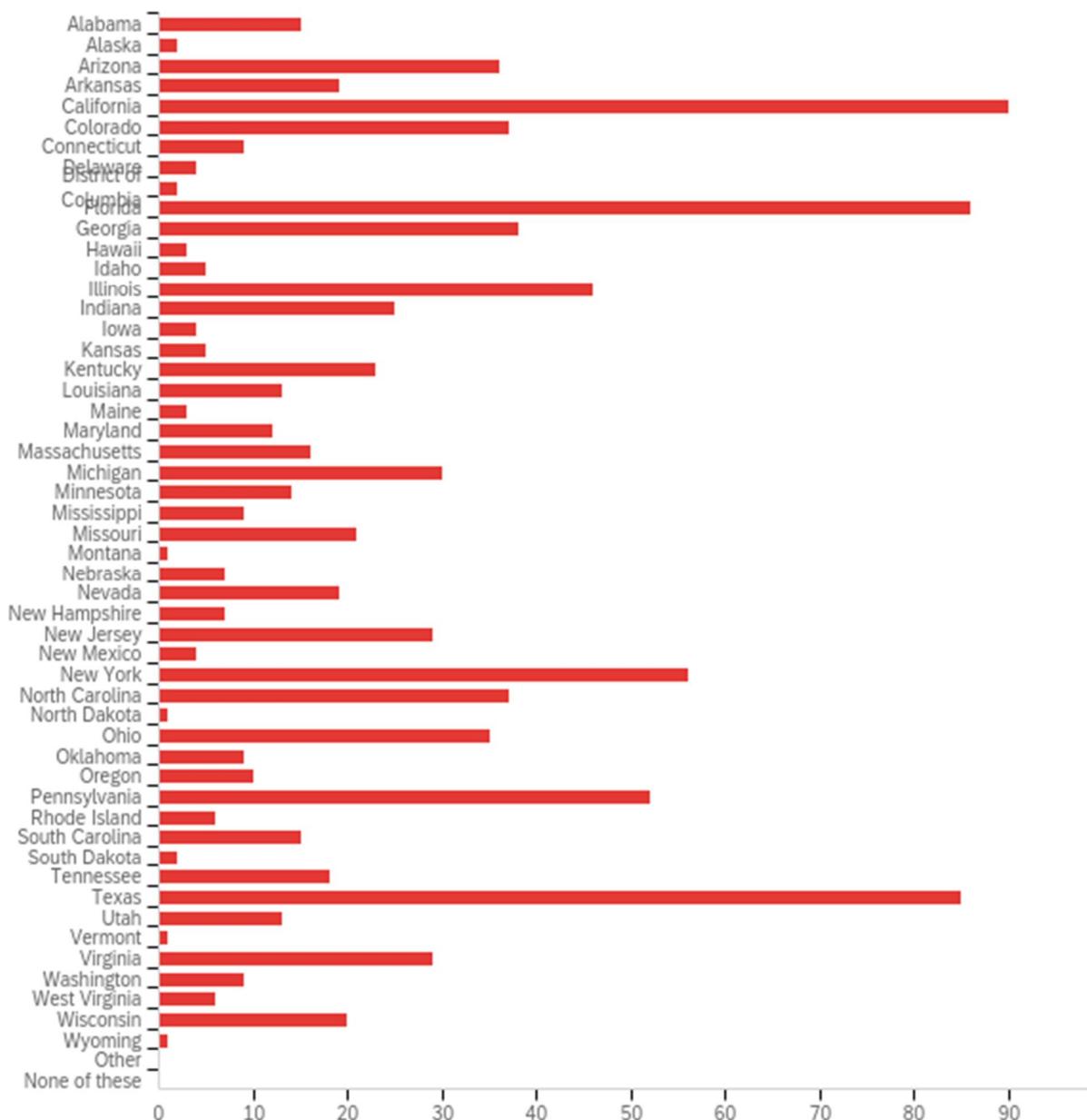
#	Answer	%	Count
1	I agree	100.0%	1039
2	I do not agree	0.0%	0
3	Don't know	0.0%	0
	Total	100%	1039

Q3 - Which of the following age brackets contains your age on your last birthday?



#	Answer	%	Count
1	Under 18	0.0%	0
2	18 - 30	18.7%	194
3	31 - 40	22.1%	230
4	41 - 50	12.6%	131
5	51 - 60	19.8%	206
6	61 - 70	17.9%	186
7	71 or older	8.9%	92
	Total	100%	1039

Q4 - In which U.S. state do you currently reside?

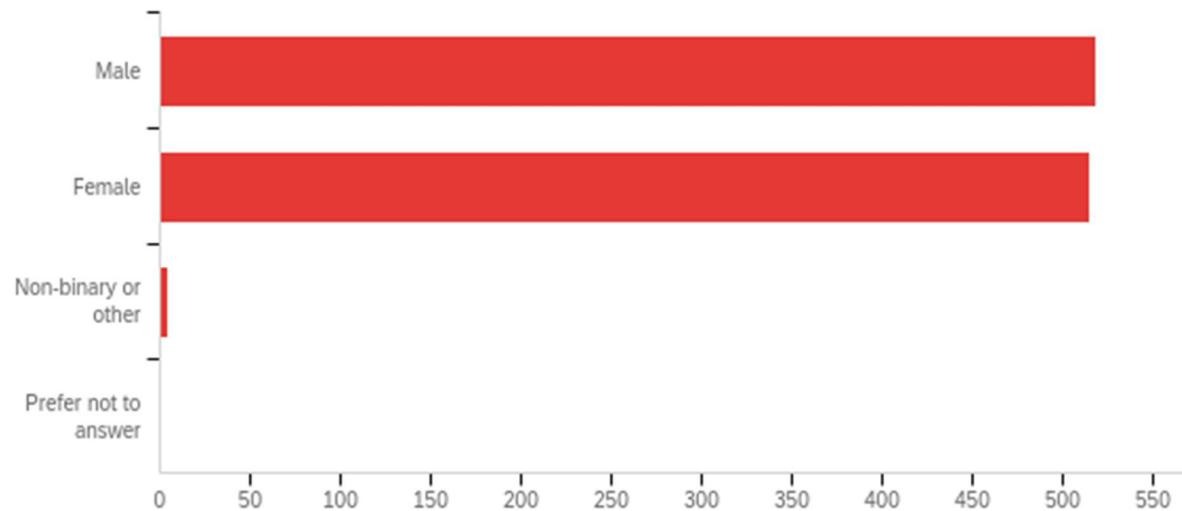


#	Answer	%	Count
1	Alabama	1.4%	15
2	Alaska	0.2%	2
3	Arizona	3.5%	36
4	Arkansas	1.8%	19
5	California	8.7%	90
6	Colorado	3.6%	37

7	Connecticut	0.9%	9
8	Delaware	0.4%	4
9	District of Columbia	0.2%	2
10	Florida	8.3%	86
11	Georgia	3.7%	38
12	Hawaii	0.3%	3
13	Idaho	0.5%	5
14	Illinois	4.4%	46
15	Indiana	2.4%	25
16	Iowa	0.4%	4
17	Kansas	0.5%	5
18	Kentucky	2.2%	23
19	Louisiana	1.3%	13
20	Maine	0.3%	3
21	Maryland	1.2%	12
22	Massachusetts	1.5%	16
23	Michigan	2.9%	30
24	Minnesota	1.3%	14
25	Mississippi	0.9%	9
26	Missouri	2.0%	21
27	Montana	0.1%	1
28	Nebraska	0.7%	7
29	Nevada	1.8%	19
30	New Hampshire	0.7%	7
31	New Jersey	2.8%	29
32	New Mexico	0.4%	4
33	New York	5.4%	56
34	North Carolina	3.6%	37
35	North Dakota	0.1%	1
36	Ohio	3.4%	35

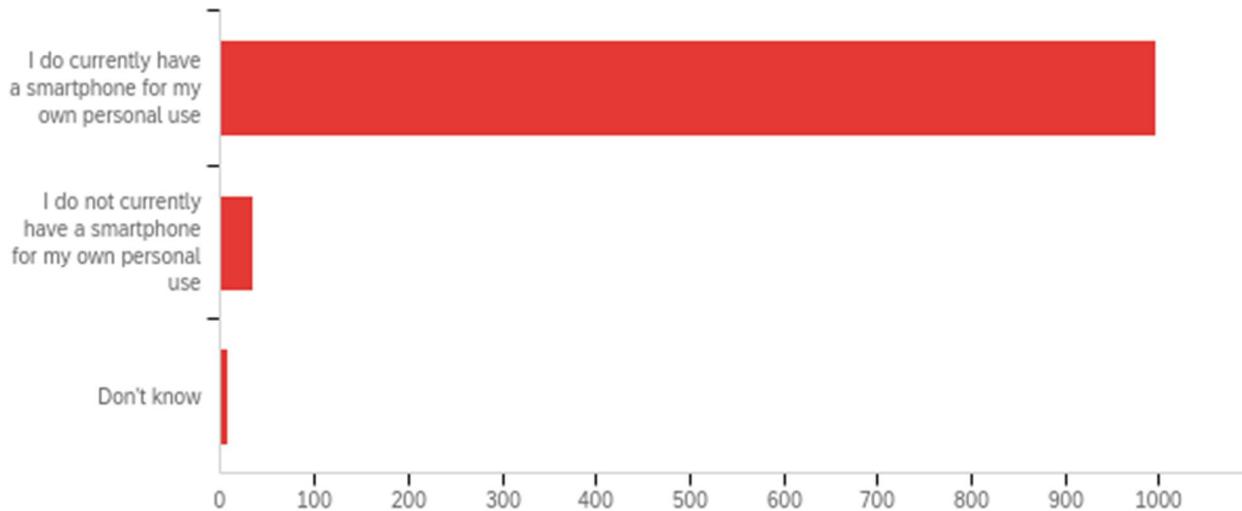
37	Oklahoma	0.9%	9
38	Oregon	1.0%	10
39	Pennsylvania	5.0%	52
40	Rhode Island	0.6%	6
41	South Carolina	1.4%	15
42	South Dakota	0.2%	2
43	Tennessee	1.7%	18
44	Texas	8.2%	85
45	Utah	1.3%	13
46	Vermont	0.1%	1
47	Virginia	2.8%	29
48	Washington	0.9%	9
49	West Virginia	0.6%	6
50	Wisconsin	1.9%	20
51	Wyoming	0.1%	1
52	Other	0.0%	0
53	None of these	0.0%	0
	Total	100%	1039

Q5 - What is your gender?



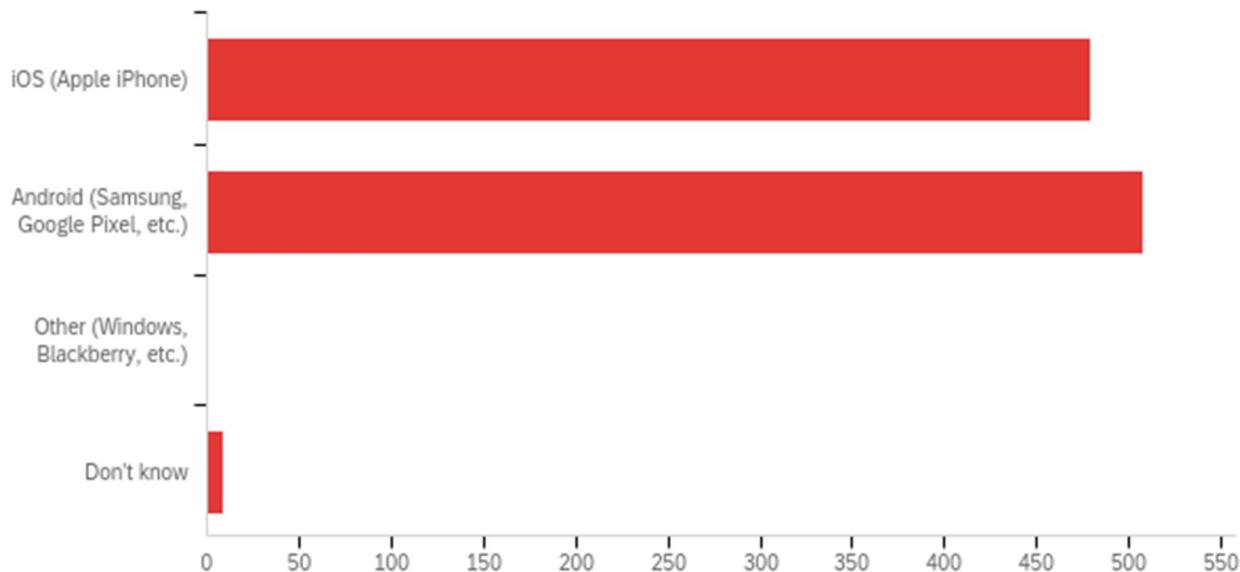
#	Answer	%	Count
1	Male	50.0%	519
2	Female	49.7%	516
3	Non-binary or other	0.4%	4
4	Prefer not to answer	0.0%	0
	Total	100%	1039

Q7 - Which of the following applies to you personally?



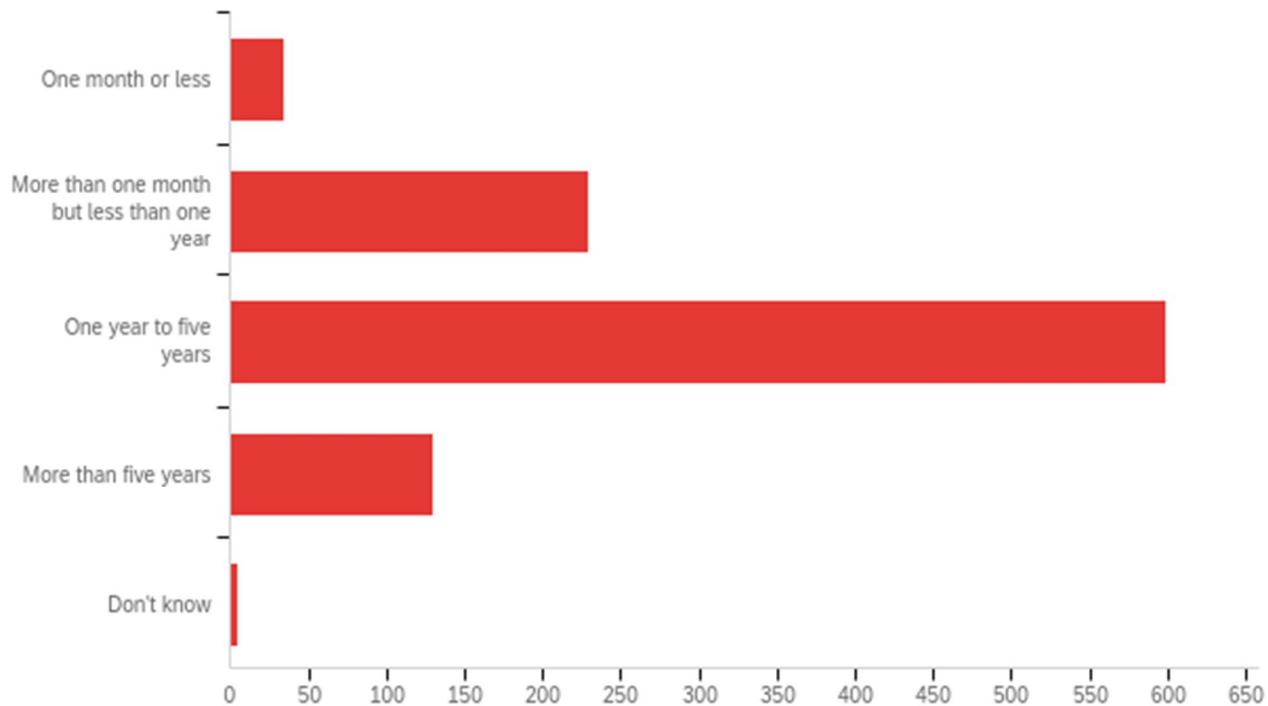
#	Answer	%	Count
1	I do currently have a smartphone for my own personal use	96.0%	997
2	I do not currently have a smartphone for my own personal use	3.3%	34
3	Don't know	0.8%	8
	Total	100%	1039

Q8 - What operating system do you have on your primary device?



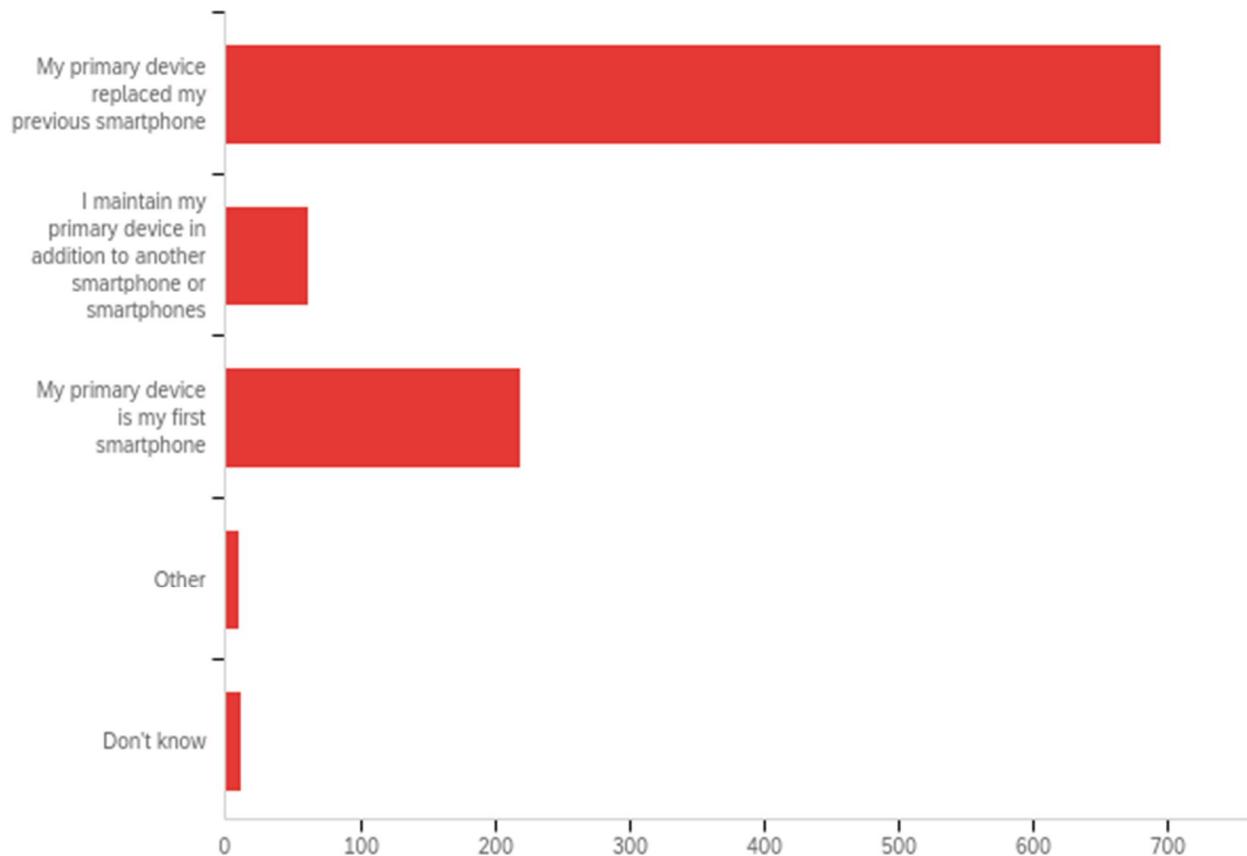
#	Answer	%	Count
1	iOS (Apple iPhone)	48.1%	480
2	Android (Samsung, Google Pixel, etc.)	51.0%	508
3	Other (Windows, Blackberry, etc.)	0.1%	1
4	Don't know	0.8%	8
	Total	100%	997

Q9 - How long have you had your primary device?



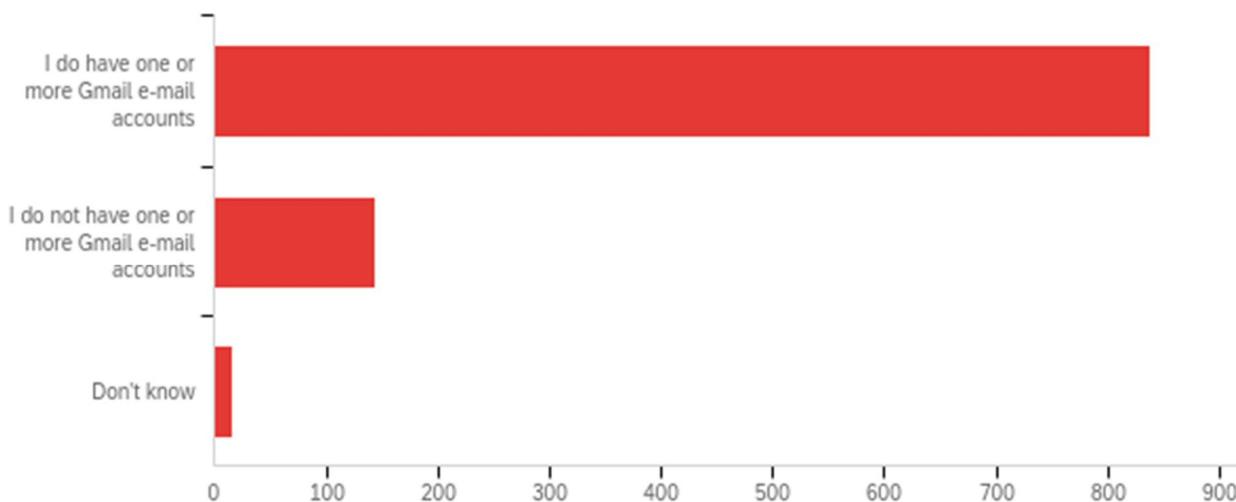
#	Answer	%	Count
1	One month or less	3.4%	34
2	More than one month but less than one year	23.0%	229
3	One year to five years	60.1%	599
4	More than five years	13.0%	130
5	Don't know	0.5%	5
Total		100%	997

Q10 - Which of the following most accurately describes your primary device?



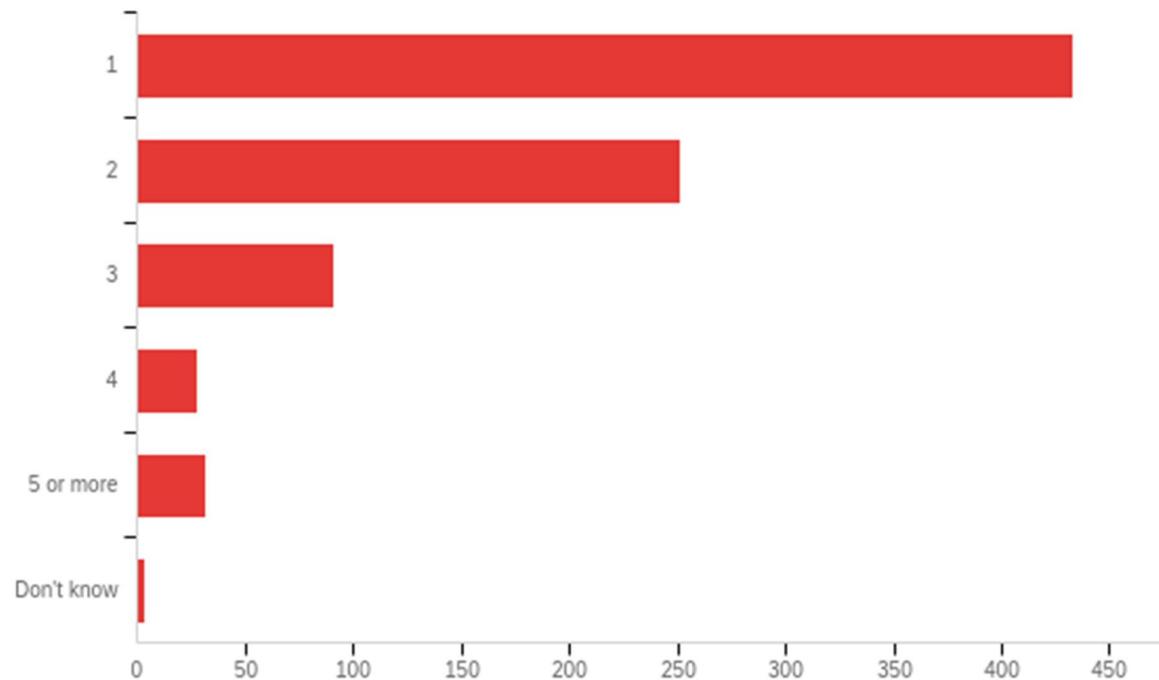
#	Answer	%	Count
1	My primary device replaced my previous smartphone	69.8%	696
2	I maintain my primary device in addition to another smartphone or smartphones	6.1%	61
3	My primary device is my first smartphone	22.0%	219
4	Other	1.0%	10
5	Don't know	1.1%	11
	Total	100%	997

Q11 - Do you currently have one or more Google Gmail e-mail accounts? A Gmail account is an e-mail account that has an e-mail address that ends in @gmail.com.



#	Answer	%	Count
1	I do have one or more Gmail e-mail accounts	84.1%	838
2	I do not have one or more Gmail e-mail accounts	14.3%	143
3	Don't know	1.6%	16
	Total	100%	997

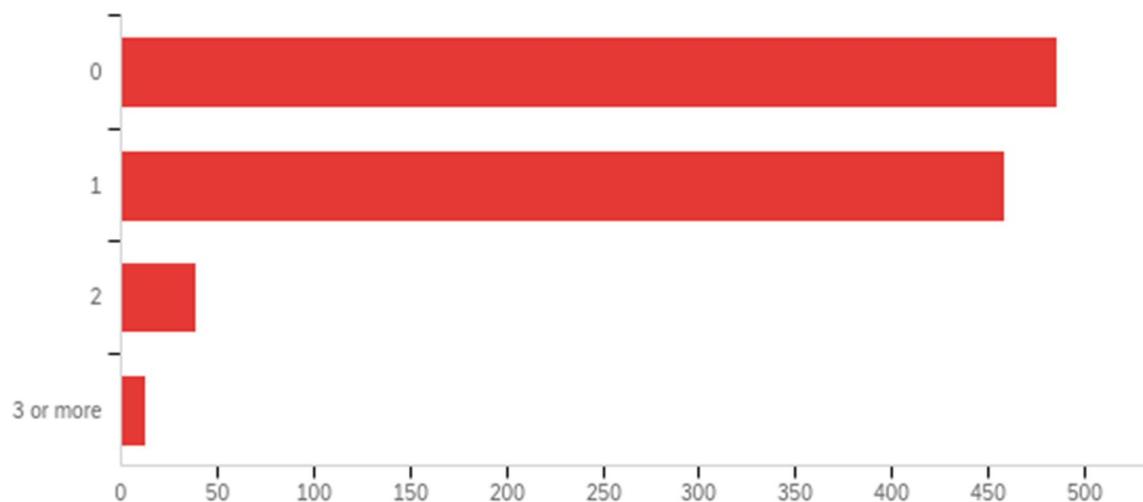
Q12 - How many Gmail e-mail accounts do you currently have?



#	Answer	%	Count
1	1	51.7%	433
2	2	30.0%	251
3	3	10.9%	91
4	4	3.3%	28
5	5 or more	3.8%	32
6	Don't know	0.4%	3
	Total	100%	838

#	Field	Mean	Count
1	Gmail number	1.8	838

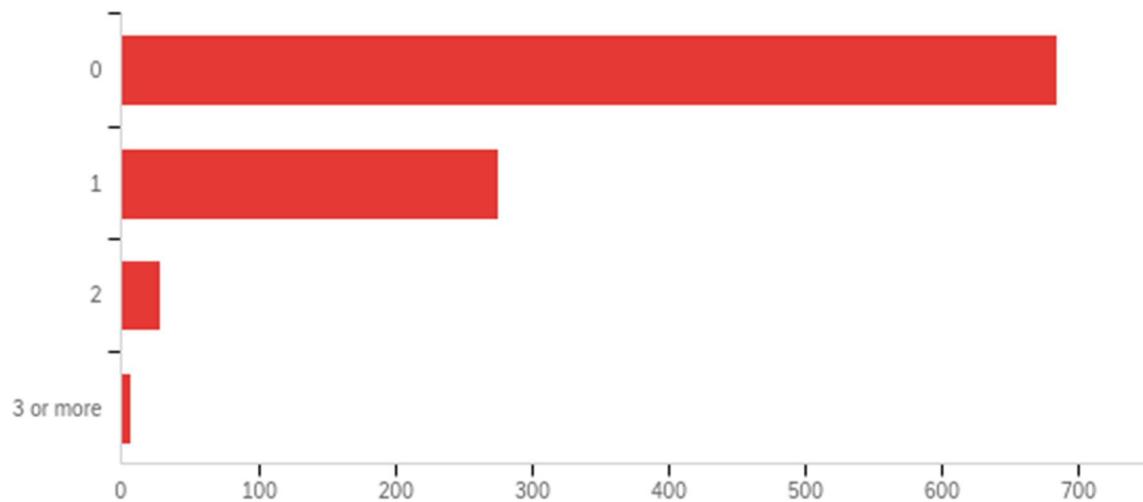
Q14 - How many of each of the following personal mobile devices do you currently use? - Apple iPhone



#	Answer	%	Count
1	0	48.7%	486
2	1	46.0%	459
3	2	3.9%	39
4	3 or more	1.3%	13
	Total	100%	997

#	Field	Mean	Count
1	Number - Apple iPhone	1.1	997

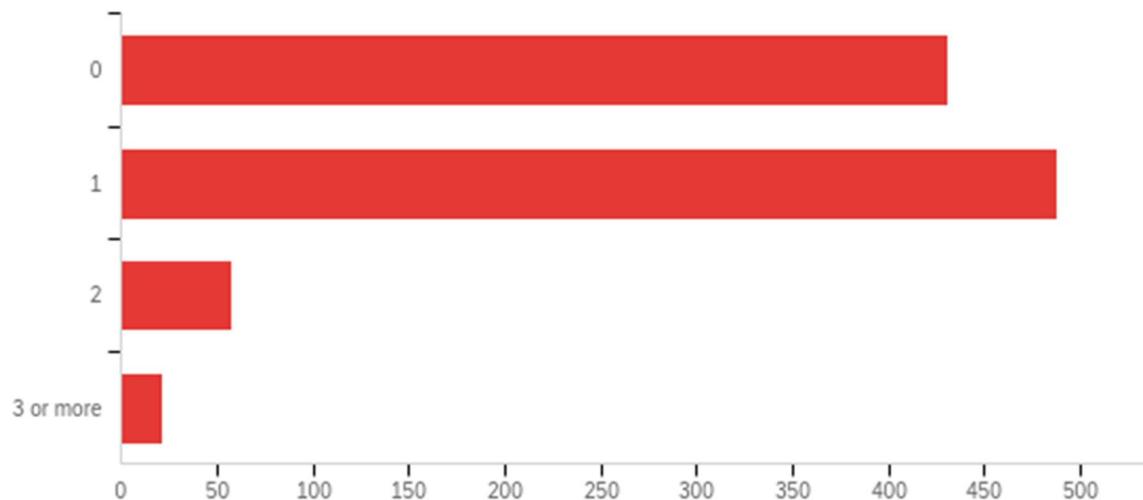
Q15 - How many of each of the following personal mobile devices do you currently use? - Apple iPad



#	Answer	%	Count
1	0	68.7%	685
2	1	27.7%	276
3	2	2.9%	29
4	3 or more	0.7%	7
	Total	100%	997

#	Field	Mean	Count
1	Number - Apple iPad	1.1	997

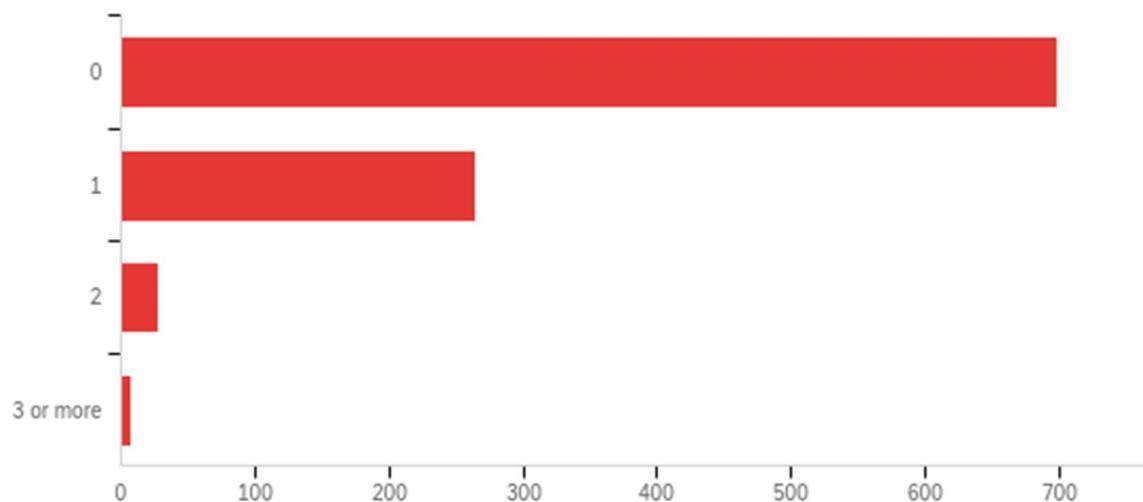
Q16 - How many of each of the following personal mobile devices do you currently use? -
Android phone



#	Answer	%	Count
1	0	43.2%	431
2	1	48.9%	488
3	2	5.7%	57
4	3 or more	2.1%	21
	Total	100%	997

#	Field	Mean	Count
1	Number - Android phone	1.2	997

Q17 - How many of each of the following personal mobile devices do you currently use? -
Android tablet

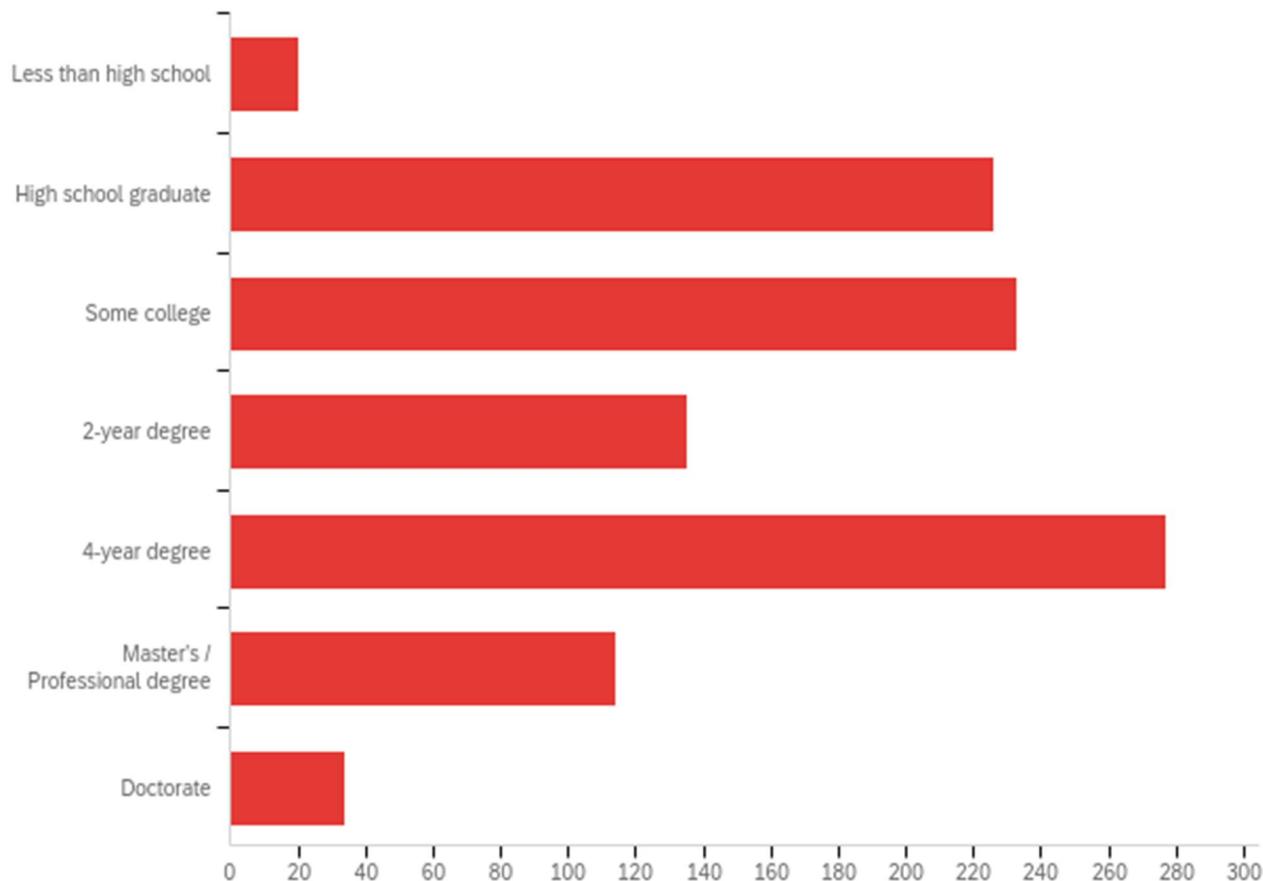


#	Answer	%	Count
1	0	70.1%	699
2	1	26.5%	264
3	2	2.7%	27
4	3 or more	0.7%	7
	Total	100%	997

#	Field	Mean	Count
1	Number - Android tablet	1.1	997

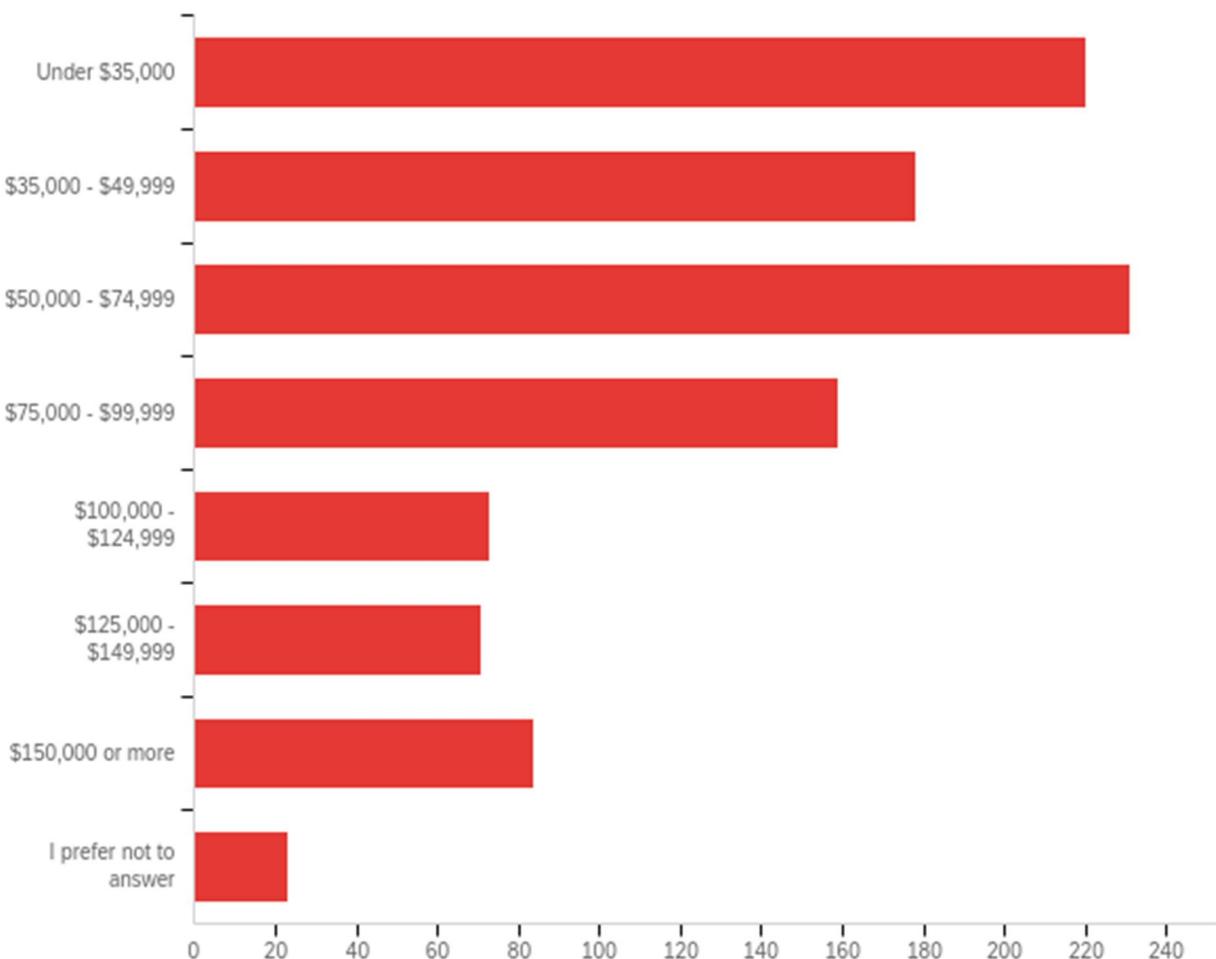
Q18 - Please type "green" in the box below.

Q19 - Which of the following best describes your educational background?



#	Answer	%	Count
1	Less than high school	1.9%	20
2	High school graduate	21.8%	226
3	Some college	22.4%	233
4	2-year degree	13.0%	135
5	4-year degree	26.7%	277
6	Master's / Professional degree	11.0%	114
7	Doctorate	3.3%	34
	Total	100%	1039

Q20 - Which of the following includes your household's approximate annual income in 2022?



#	Answer	%	Count
1	Under \$35,000	21.2%	220
2	\$35,000 - \$49,999	17.1%	178
3	\$50,000 - \$74,999	22.2%	231
4	\$75,000 - \$99,999	15.3%	159
5	\$100,000 - \$124,999	7.0%	73
6	\$125,000 - \$149,999	6.8%	71
7	\$150,000 or more	8.1%	84
8	I prefer not to answer	2.2%	23
	Total	100%	1039

Exhibit 6—Untabulated Data

Produced electronically.

Exhibit 7—Disposition of Contacts



Disposition of Contacts - Anibal Rodriguez, et al. v. Google, LLC

	n	%
Responded to invitation	1,193	100.0%
Rejected - failed instruction acknowledgement question	104	8.7%
Rejected - failed age question (under 18)	17	1.4%
Rejected - failed - did not select a state	0	0.0%
Rejected - low quality - failed security question ("Green")	8	0.7%
Rejected - speeder	3	0.3%
Rejected - overquota	22	1.8%
Total qualified respondents	<hr/> 1,039	<hr/> 87.1%